The Early Bird Gets...Counted!

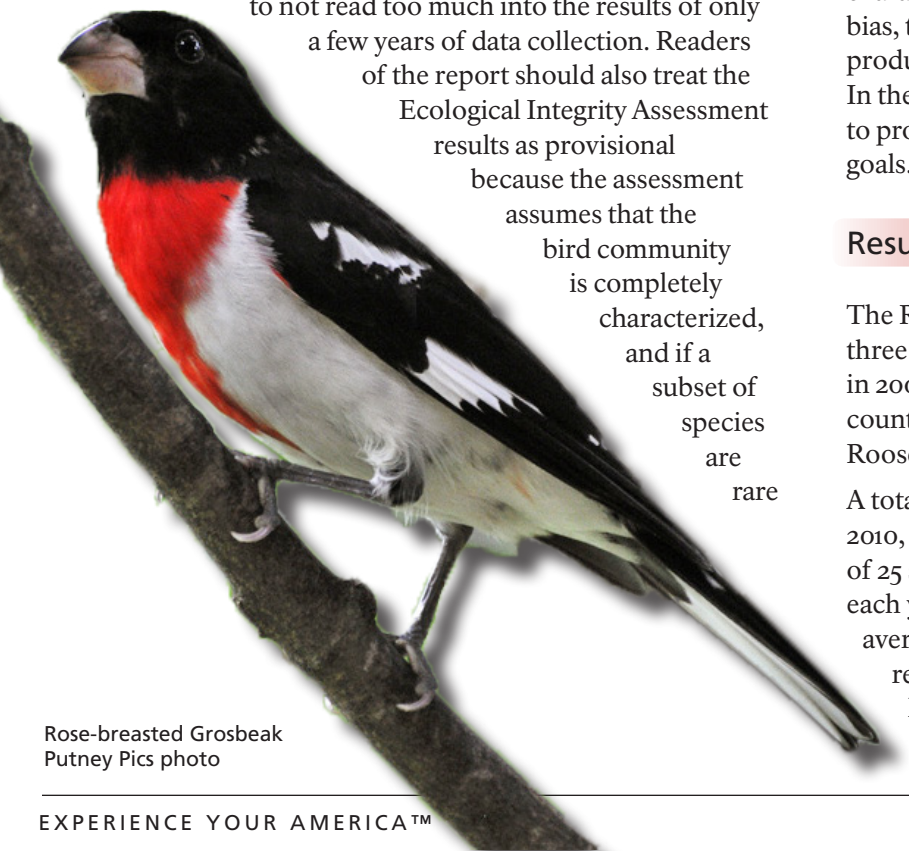
Results from 2010 Breeding Landbird Survey at Franklin D. Roosevelt

Background

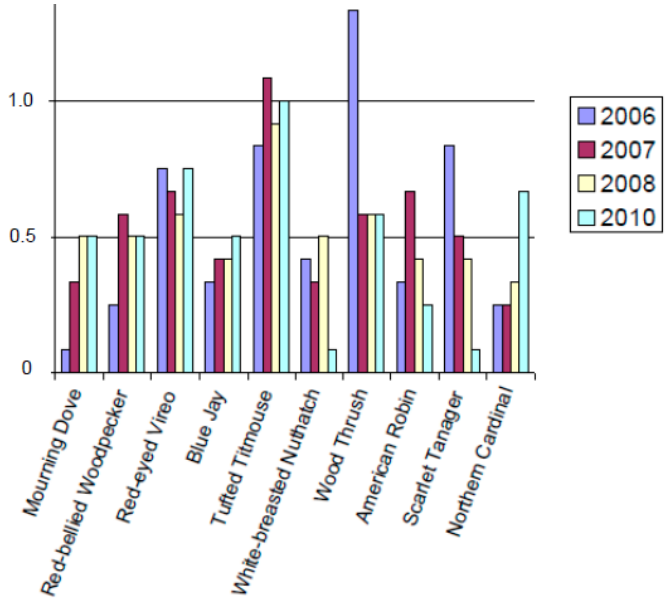
With the invaluable help of volunteer birders that traverse mosquito infested forests and who start their surveys even before the sun wakes up in the morning, the Northeast Temperate Network (NETN) and the Vermont Center for Ecostudies (VCE) have been monitoring breeding landbirds in most network parks since 2006. On a broad scale, all 13 network parks are located within the temperate deciduous forest biome. At a finer scale, the parks range across four Bird Conservation Regions (BCR) with Franklin D. Roosevelt lying in the Lower Great Lakes/St. Lawrence Plain BCR. BCR's, developed by the North American Bird Conservation Initiative, are ecologically defined areas that provide a consistent framework for bird conservation across North America. Each BCR has its own unique list of "priority" species ranked by conservation importance according to a standardized set of criteria.

Purpose and Scope

This latest report summarizes data collected from 2006 through 2010. As with any long-term study, as more years of data accumulate, interpreting study results becomes more relevant and meaningful. Therefore, it is important to not read too much into the results of only a few years of data collection. Readers of the report should also treat the Ecological Integrity Assessment results as provisional because the assessment assumes that the bird community is completely characterized, and if a subset of species are rare and hard to detect, the results could be biased. Also, many NETN parks were founded with a primary objective to manage for the historical landscape rather than biological integrity or ecosystem structure and function; thus, management action may not always be warranted when some groups of bird species are rated "significant concern." In an attempt to better characterize the bird community at each park and reduce bias, the 2010 assessment results presented for each park were produced by combining data from all survey years at the park. In the future, NETN plans to work directly with park managers to produce a parallel assessment based on park management goals.



Rose-breasted Grosbeak
Putney Pics photo



The 10 most common species detected at Franklin D. 2006 - 2010.

Results and Findings

The Roosevelt-Vanderbilt National Historic Sites consist of three separate park units at which study sites were established in 2006 and surveyed annually. One study site with 12 point count locations was established at the Home of Franklin D. Roosevelt and surveyed in all years except 2009.

A total of 91 individual birds of 23 species were detected in 2010, 83 of 23 species in 2008, 101 of 29 species in 2007, and 94 of 25 species in 2006. Twelve point counts were conducted each year. In total, 40 species were recorded, and there was an average abundance of 7.7 birds per point. Compared to 2008, relative abundance increased in 2010, while species richness held steady. Four species of conservation concern were detected during the four survey years: Eastern Wood-

40 Bird Species in Franklin D.

American Crow
American Goldfinch
American Robin
Baltimore Oriole
Blue-gray Gnatcatcher
Blue-headed Vireo
Black-capped Chickadee
Blue Jay
Brown Creeper
Brown-headed Cowbird
Canada Goose
Carolina Wren
Common Grackle
Common Yellowthroat
Downy Woodpecker
Eastern Wood-Pewee
Fish Crow
Great Crested Flycatcher
Hairy Woodpecker
Least Flycatcher
Louisiana Waterthrush
Mourning Dove
Mute Swan
Northern Cardinal
Northern Flicker (Yellow-shafted Flicker)
Ovenbird
Pileated Woodpecker
Red-bellied Woodpecker
Red-eyed Vireo
Red-tailed Hawk
Red-winged Blackbird
Rose-breasted Grosbeak
Scarlet Tanager
Tufted Titmouse
White-breasted Nuthatch
Wild Turkey
Wood Thrush
Worm-eating Warbler
Yellow-billed Cuckoo
Yellow-throated Vireo

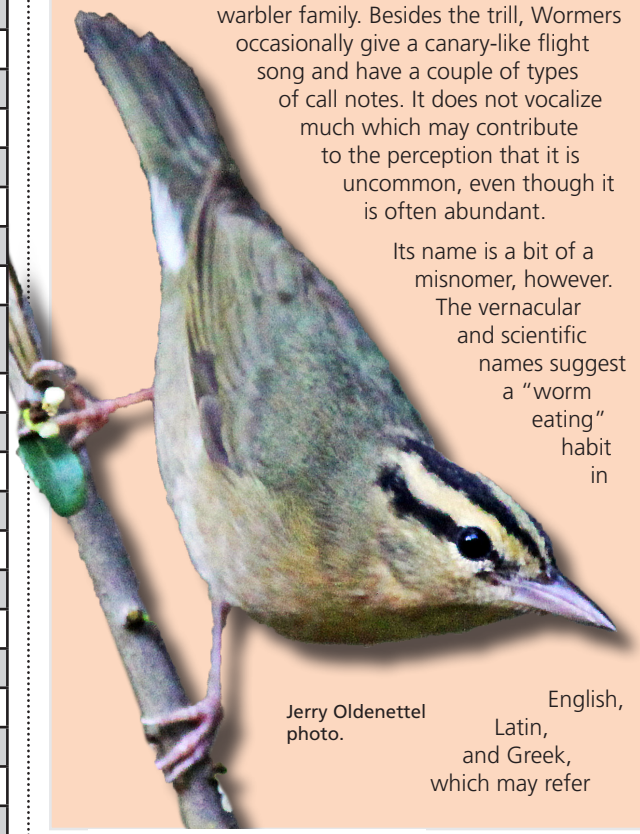
Pewee, Wood Thrush, Worm-eating Warbler, and Baltimore Oriole.

The park-wide forest avian Ecological Integrity Assessment (EIA) for all years combined at the park resulted in two categories ranked as "Good" and 10 ranked as "Caution". This represents a slight improvement over 2008 results when two categories ("single brooded" and "low canopy foragers") were ranked as "Significant Concern." The EIA has been calculated for each site individually, and the results are provided in Appendix C of the report. For more information on findings for this park and all other Network parks, download the report from NETN's Monitoring webpage.

Species Spotlight:

Worm-eating Warbler

The almost insect-like buzzy trill of the modest and retiring Worm-eating Warbler is a familiar sound in the forests during the summer on warm and humid mornings. Found mainly in the large deciduous forests of Appalachia and neighboring states, its year-round plumage of earth shades broken only by black stripes on its head is shared by both males,females and even the juveniles of this species. They also have one of the smallest vocal repertoires in the warbler family. Besides the trill, Wormers occasionally give a canary-like flight song and have a couple of types of call notes. It does not vocalize much which may contribute to the perception that it is uncommon, even though it is often abundant.



Jerry Oldenettel photo.

Its name is a bit of a misnomer, however. The vernacular and scientific names suggest a "worm eating" habit in English, Latin, and Greek, which may refer to the Wormer's foraging for caterpillars during the breeding season, a trait it shares with most other wood warblers. It is also possible that a female was observed gathering hair moss for nesting material by scratching the bare earth and this behavior was mistook for hunting for worms.

Wormer nests are cups of broken leaves lined with hair moss and usually tucked under a shrub, root, or log on the ground. Late in incubation the female sits so tight on her nest that she won't leave it unless she is physically touched, relying on her cryptic coloring to make immobility a safe strategy. If she is flushed, she will flutter across the ground with her wings and tail spread, acting helpless to lure predators away from the nest. Quick fledgers, young Worm-eating Warblers typically leave their nest 8-10 days after hatching. Chicks as young as five days old have been observed leaving the nest and surviving, though they cannot even fly at that age.

Although the Worm-eating Warbler forages in the understory near the ground and nests on the ground, it does not spend much time on the forest floor. It does not forage there, and when on the ground it hops instead of walking. Most Wormers winter in the Caribbean Basin where they search the aerial leaf litter of the understory and mid-strata of tropical forests. Aerial leaf litter consists of leaves that are caught in the vegetation as they fall from the canopy, sewn to branches by fungal mycelium, and become home to large tropical spiders and insects. These arthropods are protected from most birds. But a few, such as the Wormer—by hanging on the leaf, inserting their bill into the leaf tube, and slowly opening their mandibles—can capture many of the juicy items within.

Forest fragmentation on its breeding grounds increases the bird's exposure to nest predation and cowbird parasitism, while deforestation of broadleaf forest on the species' wintering grounds in the Caribbean and Central America could also lead to population declines.

More Information

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Full Report online at:
http://science.nature.nps.gov/im/units/NETN/monitor/flashmo_220_nature/monitor_flash.cfm

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